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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,541	10/16/2003	David A. Morgenstern	MTC 6888.2 (39-21 7748 (52925)	
321 7590 03/13/2007 SENNIGER POWERS EXAMINER				
ONE METROP	POLITAN SQUARE	ECHELMEYER, ALIX ELIZABETH		
16TH FLOOR ST LOUIS, MO 63102			ART UNIT	PAPER NUMBER
			1745	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE	
31 DAYS		03/13/2007	ELECTRONIC	

# Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 31 DAYS from 03/13/2007.

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		. /				
	Application No.	Applicant(s)				
	10/687,541	MORGENSTERN, DAVID A.				
Office Action Summary	Examiner	Art Unit				
	Alix Elizabeth Echelmeyer	1745				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D/ Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period versilized to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 05 D	ecember 2006.					
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·—						
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-130</u> is/are pending in the application	n.					
4a) Of the above claim(s) is/are withdraw						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8)⊠ Claim(s) <u>1-130</u> are subject to restriction and/or	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	er.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct						
11)☐ The oath or declaration is objected to by the Ex	kaminer. Note the attached Office	e Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a	a)-(d) or (f).				
1. Certified copies of the priority document	s have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the prior	rity documents have been receiv	ved in this National Stage				
application from the International Burea						
* See the attached detailed Office action for a list	of the certified copies not receiv	red.				
Attachment(s)	4) 🔲 Interview Summar	ov (PTO-413)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summar Paper No(s)/Mail [					
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal	Patent Application				
Paper No(s)/Mail Date	6)					

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### **DETAILED ACTION**

## Response to Amendment

1. This Office Action is in response to the amendment filed December 5, 2006.

Claims 1, 53 and 87 have been amended. Claims 88-130 have been added. Claims 1
130 are pending and are subject to the Election/Restriction requirement below.

### Election/Restrictions

- 2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-52, 88-108 and 117-130, drawn to a method for reforming alcohol using a copper coated metal sponge support catalyst, classified in class 423, subclass 248.
  - II. Claims 53-87 and 109-116, drawn to a method for producing electricity from a fuel cell, including reforming alcohol to be used as fuel on a metal support catalyst having copper at its surface, classified in class 429, subclass 34.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the

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particulars of the subcombination as claimed because the combination, the fuel cell method, does not require that the copper coated metal sponge supported catalyst be made by a process including leaching aluminum from an alloy comprising aluminum and a base metal. The subcombination has separate utility such as a method for producing hydrogen to be used in operations other than for use in a fuel cell. For example, hydrogen may be used to steam reform hydrocarbons.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

- 4. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
- 5. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required

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because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

- 6. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 7. This application contains claims directed to the following patentably distinct species: in claims 91, 92, 102, 103, 110, 111, 128 and 129, the base metal material. The species are independent or distinct because they are drawn to different materials or combinations.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1, 101, 109 and 127 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations

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of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alix Elizabeth Echelmeyer whose telephone number is 571-272-1101. The examiner can normally be reached on Mon-Fri 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's trainer, Susy N. Tsang-Foster can be reached on 571-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alix Elizabeth Echelmeyer

SUSYTSANG-FOSTER PRIMARY EXAMINER